Multiple Comparison of Means - Tukey HSD, FWER=0.05

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group1 group2 meandiff p-adj lower upper reject

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JAM1 JAM2 -0.0578 0.0 -0.0684 -0.0473 True

JAM1 JAM3 0.0097 0.0755 -0.0007 0.0201 False

JAM2 JAM3 0.0675 0.0 0.0572 0.0778 True

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Multiple Comparison of Means - Tukey HSD, FWER=0.05

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group1 group2 meandiff p-adj lower upper reject

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Acidic->Basic Acidic>Other 0.1097 0.0 0.0459 0.1735 True

Acidic->Basic All 0.0694 0.0135 0.0086 0.1303 True

Acidic->Basic Basic->Acidic 0.0474 0.6249 -0.0354 0.1302 False

Acidic->Basic Basic>Other 0.0304 0.7943 -0.033 0.0938 False

Acidic->Basic Other>Acidic 0.1433 0.0 0.0793 0.2073 True

Acidic->Basic Other>Basic 0.1164 0.0 0.0523 0.1804 True

Acidic>Other All -0.0403 0.0 -0.0615 -0.0191 True

Acidic>Other Basic->Acidic -0.0624 0.0357 -0.1224 -0.0023 True

Acidic>Other Basic>Other -0.0793 0.0 -0.1069 -0.0517 True

Acidic>Other Other>Acidic 0.0336 0.0116 0.0045 0.0626 True

Acidic>Other Other>Basic 0.0066 0.9942 -0.0225 0.0358 False

All Basic->Acidic -0.0221 0.9147 -0.079 0.0348 False

All Basic>Other -0.039 0.0 -0.0589 -0.0191 True

All Other>Acidic 0.0739 0.0 0.052 0.0957 True

All Other>Basic 0.0469 0.0 0.0249 0.0689 True

Basic->Acidic Basic>Other -0.017 0.9808 -0.0766 0.0426 False

Basic->Acidic Other>Acidic 0.0959 0.0001 0.0357 0.1562 True

Basic->Acidic Other>Basic 0.069 0.0132 0.0086 0.1293 True

Basic>Other Other>Acidic 0.1129 0.0 0.0848 0.141 True

Basic>Other Other>Basic 0.086 0.0 0.0577 0.1142 True

Other>Acidic Other>Basic -0.0269 0.1032 -0.0566 0.0027 False

Acidic→Basic (N=192): Mean = 0.4258, Median = 0.4169

Other mutations (N=24308): Mean = 0.5028, Median = 0.5025

T-test: t = -3.923, p = 1.215e-04

Mann–Whitney U: U = 1975604.0, p = 2.447e-04

=== Acidic->Basic vs. Others (All Proteins Combined) ===

Acidic->Basic (N=192): Mean = 0.4258, Median = 0.4169

Other Mutations (N=24308): Mean = 0.5028, Median = 0.5025

T-test: t = -3.923, p = 1.215e-04

Mann–Whitney U: U = 1975604.0, p = 2.447e-04

Cohen's d = -0.269

=== Acidic->Basic vs. Others (JAM2) ===

Acidic->Basic (N=58): Mean = 0.3741, Median = 0.3502

Other Mutations (N=8015): Mean = 0.4606, Median = 0.4543

T-test: t = -2.593, p = 1.201e-02

Mann–Whitney U: U = 191786.0, p = 2.151e-02

Cohen's d = -0.305

=== Acidic->Basic vs. Others (JAM1) ===

Acidic->Basic (N=56): Mean = 0.3952, Median = 0.4054

Other Mutations (N=7842): Mean = 0.5187, Median = 0.5191

T-test: t = -3.586, p = 7.062e-04

Mann–Whitney U: U = 164505.5, p = 1.198e-03

Cohen's d = -0.455

=== Acidic->Basic vs. Others (JAM3) ===

Acidic->Basic (N=78): Mean = 0.4863, Median = 0.4762

Other Mutations (N=8451): Mean = 0.5279, Median = 0.5331

T-test: t = -1.286, p = 2.022e-01

Mann–Whitney U: U = 303086.0, p = 2.207e-01

Cohen's d = -0.140

=== Basic->Acidic vs. Others (All Proteins Combined) ===

Basic->Acidic (N=220): Mean = 0.4732, Median = 0.4592

Other Mutations (N=24280): Mean = 0.5024, Median = 0.5020

T-test: t = -1.655, p = 9.926e-02

Mann–Whitney U: U = 2510465.0, p = 1.246e-01

Cohen's d = -0.102

=== Basic->Acidic vs. Others (JAM2) ===

Basic->Acidic (N=80): Mean = 0.4259, Median = 0.4151

Other Mutations (N=7993): Mean = 0.4604, Median = 0.4543

T-test: t = -1.240, p = 2.185e-01

Mann–Whitney U: U = 297314.0, p = 2.799e-01

Cohen's d = -0.122

=== Basic->Acidic vs. Others (JAM1) ===

Basic->Acidic (N=60): Mean = 0.4780, Median = 0.4863

Other Mutations (N=7838): Mean = 0.5182, Median = 0.5187

T-test: t = -1.378, p = 1.733e-01

Mann–Whitney U: U = 214602.5, p = 2.431e-01

Cohen's d = -0.148

=== Basic->Acidic vs. Others (JAM3) ===

Basic->Acidic (N=80): Mean = 0.5170, Median = 0.5087

Other Mutations (N=8449): Mean = 0.5276, Median = 0.5330

T-test: t = -0.323, p = 7.472e-01

Mann–Whitney U: U = 331218.0, p = 7.583e-01

Cohen's d = -0.036